

AMENDMENTS TO THE SPECIFICATION

Replace the paragraph at page 56, line 1, through and including all of page 58, with:

Hematopoiesis could also be induced when ES-like cells were cultured in methylcellulose to form embryoid bodies (Figure 14I). When ES-like cells were transferred onto gelatin-coated dishes for the differentiation of neural-lineage cells (Nat. Biotech., vol.21, p183-186, 2003), they formed neurons (MAP2 positive cells) or glial cells (MBP positive cells) (Figure 14 J-L). Dopaminergic neurons were also found, albeit at low frequency (Figure 14M). When the present inventors compared the differentiation efficiency using ES cells, ES-like cells produced more glial cells than did ES cells, and there were significantly more vessel cell (endothelial cell and the like) or heart muscle cell colonies from ES-like cells. However, ES-like cells could produce all of the expected lineages using protocols for ES cell differentiation (Table 1).

Table 1

Cell type	Hematopoiesis*†			Vasculogenesis*‡		Neurogenesis§		
	Increase in cell number (fold)	Granulocyte/Macrophage (%)	Erythrocyte (%)	Vessel¶	Heart¶	Neuron¶	Astrocyte¶	Oligodendrocyte¶
ES-like	116.7 ± 15.4	7.6 ± 0.2	19.9 ± 0.7	111.5 ± 12.0	8.0 ± 4.5	126.7 ± 14.4	34.6 ± 4.4	4.6 ± 2.5
ES cell	102.3 ± 11.6	7.6 ± 0.4	24.7 ± 0.9	49.0 ± 9.2	3.8 ± 2.0	162.2 ± 14.5	10.5 ± 3.3	0.2 ± 0.1

Table 1

Cell type	Hematopoiesis*†			Vasculogenesis*‡		Neurogenesis§		
	Increase in cell number (fold)	Granulocyte/Macrophage (%)	Erythrocyte (%)	Vessel¶	Heart¶	Neuron¶	Astrocyte¶	Oligodendrocyte¶
ES-like	116.7 ± 15.4	7.6 ± 0.2	19.9 ± 0.7	111.5 ± 12.0	8.0 ± 4.5	126.7 ± 14.4	34.6 ± 4.4	4.6 ± 2.5
ES cell	102.3 ± 11.6	7.6 ± 0.4	24.7 ± 0.9	49.0 ± 9.2	3.8 ± 2.0	162.2 ± 14.5	10.5 ± 3.3	0.2 ± 0.1

Replace the paragraph at page 59, lines 1-21, with:

Table 1 shows in Vitro Differentiation of ES-Like Cells from Testis. Values in the table are mean \pm SEM. Results from at least three experiments. ES cells were derived from 129 mice, whereas ES-like cells were derived from DBA/2 mice. *: Flk-1-positive cells ~~(5×10^3)~~ (5×10^3) were sorted, 4 days after co-culture and replated on OP9 feeder in 24-well plate. †: Cells were recovered 7 days after sorting and analyzed by flow cytometry. Erythrocytes, macrophages, and granulocytes were identified by anti-Ter119, anti-Mac1, and anti-Gr1 antibodies, respectively. ‡: Numbers of positive cells in each well, 8 days after sorting. Vascular cells were determined by the uptake of DiI-acetylated low-density lipoprotein. Heart muscle colonies were identified by counting beating colonies. §: Cells ~~(2.5×10^4)~~ (2.5×10^4) were plated on gelatin in 48-well plate, and numbers of positive cells per one cm^2 were determined, 5 (neuron) or 7 (astrocytes or oligodendrocytes) days after plating. Neurons were identified by anti-Tuj antibody, whereas astrocytes and oligodendrocytes were identified by anti-GFAP or anti-MBP antibodies, respectively. Dopaminergic neurons were produced -10 cells/well. ¶: Statistically significant by t-test ($P < 0.05$).